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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,859	04/12/2004	Deuk-hwan Chang	45868	1819

1609 7590 10/25/2006

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EXAMINER

JOERGER, KAITLIN S

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,859

Applicant(s)

CHANG, DEUK-HWAN

Examiner

Kaitlin S. Joerger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamanaka et al. (US Patent 5,088,717).

Hamanaka et al. teaches an apparatus for separating and feeding printing paper sheets from a paper tray, the apparatus comprising:

- A separating/transferring roller, 230, for sucking a paper sheet from a paper stack on a paper tray and delivering the paper sheet to a scanning unit, 110;
- the separating/transferring roller comprises a lower surface facing an upper window of the scanning unit, see figure 13;
- the separating/transferring roller comprises an upper surface configured not to have an effect on the back of the lowermost paper sheet in the paper tray, see figure 13;
- a paper guiding part formed in a shape that corresponds to a shape of an outer periphery of the separating/transferring rollers, for guiding the paper sheet delivered by the separating/transferring roller, see figure 13;
- the separating/transferring has nozzle parts, 231A, formed on an outer periphery for sucking the paper sheet, and a vacuum pump for providing absorption force to the nozzle part;

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- the apparatus further comprises a paper perception sensor unit, 207, a scanning sensor unit, 264, and a controlling unit for controlling the operation of the vacuum pump;
- the nozzles parts are formed in a straight line, wherein there are two parallel straight lines, in an axial direction of the roller, see figure 3;
- the separating/transferring roller has a frictional part on its outer peripheral surface except in the vicinity of the nozzle part so that increased frictional force is exerted on the delivered paper sheet, see column 9, lines 6+ and figure 3;
- the control unit operates the vacuum pump if a scanning command of a user is input after the paper perception unit is turned on, see item (3)-(7) in columns 11 and 12;
- the controlling unit stops operations of the vacuum pump if the scanning unit sensor is turned on by a front end of the sheet, and operates the vacuum pump again if a rear end of the delivered sheet passes by the scanning sensor unit, see items (10) through (12) in column 12 and 13;
- the vacuum pump is turned off if the paper perception unit and scanning sensor unit are all turned off
- the separating/transferring roller comprises a single roller, see figures 2 and 3, for sucking the paper sheet from the stack on the paper tray and delivering the paper sheet to the scanning unit.

Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by

Quackenbush et al.

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Quackenbush et al. teaches an apparatus for separating and feeding printing paper sheets individually from a paper tray, 18, on which the printing paper sheets are stacked, the apparatus comprising:

- a separating/transferring roller, 24, for sucking a paper stack, S, on a paper tray, 18, and delivering the paper to a scanning unit;
- wherein the separating/transferring roller comprises a lower surface facing an upper window of the scanning unit, see figure 1;
- wherein the separating/transferring roller is configured to deliver the paper sheet directly to the scanning unit, see figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamanaka et al.

Hamanaka et al. does not specifically teach a method for separating and feeding printing paper sheets individually from a paper tray on which the printing paper sheets are stacked. However, it would have been obvious to perform the method steps of claim 20 using the apparatus taught by Hamanaka et al. in its usual and expected fashion, as Hamanaka et al. teaches a roller for sucking a paper sheet from a paper stack, delivering the paper sheet to a

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scanning unit by the single separating/transferring roller, wherein the separating/transferring roller comprises a lower surface facing an upper window of the scanning unit.

Response to Arguments

Applicant's arguments filed 16 August 2006 have been fully considered but they are not persuasive. The applicant argues that the applied reference, Hamanaka et al. does not teach the claimed invention because the reference does not teach a separating/transferring roller the comprises a lower surface facing an upper surface of the scanning unit. However, the claimed invention does not require that the roller directly face an upper window of the scanning unit, there is no limitation that requires the space between the lower surface of the roller and the scanning unit window be clear. Therefore, the reference Hamanaka et al. does in fact teach the invention as claimed, as it teaches a lower surface of the separating/transferring roller, 230, that faces an upper scanning window, 120, as clearly shown in figure 1.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kaitlin S Joerger
Examiner
Art Unit 3653

23 October 2006



PATRICK MACKEY
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